

## UNITED STATES PATENT AND TRADEMARK OFFICE



UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/743,544 05/04/2001		Ronald A. Faris	Ronald A. Faris 21486-024	2853
7:	590 05/01/2002			
Ingrid A Beattie			EXAMINER	
Mintz Levin Cohn Ferris Glovsky & Popeo One Financial Center			WOITACH, JOSEPH T	
Boston, MA 02111			ART UNIT	PAPER NUMBER
			1632	5
			DATE MAILED: 05/01/2002	· )

Please find below and/or attached an Office communication concerning this application or proceeding.

		Application N .	Applicant(s)			
	•	09/743,544	FARIS, RONALD A.			
	Offic Action Summary	Examiner	Art Unit			
		Joseph Woitach	1632			
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply						
	TREPLY ORTENED STATUTORY PERIOD FOR REPL	V IS SET TO EXPIRE 1 MON	JTH(S) FROM			
THE M - Exten after: - If the - If NO - Failur - Any re	MAILING DATE OF THIS COMMUNICATION. sions of time may be available under the provisions of 37 CFR 1.1 SIX (6) MONTHS from the mailing date of this communication. period for reply specified above is less than thirty (30) days, a reply period for reply is specified above, the maximum statutory period re to reply within the set or extended period for reply will, by statute eply received by the Office later than three months after the mailing patent term adjustment. See 37 CFR 1.704(b).	136(a). In no event, however, may a reply by within the statutory minimum of thirty (3 will apply and will expire SIX (6) MONTH: e. cause the application to become ABAN	by be timely filed  10) days will be considered timely.  S from the mailing date of this communication.  DONED (35 U.S.C. § 133).			
Status						
1)	Responsive to communication(s) filed on					
2a) <u></u>	,	nis action is non-final.				
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.						
Dispositi	on of Claims					
4)⊠ Claim(s) <u>1-48</u> is/are pending in the application.						
4a) Of the above claim(s) is/are withdrawn from consideration.						
•	Claim(s) is/are allowed.					
6)[	Claim(s) is/are rejected.	ı				
•	Claim(s) is/are objected to.		·			
• —	Claim(s) <u>1-48</u> are subject to restriction and/or	election requirement.				
• •	on Papers  The energification is objected to by the Evamine	ar.				
,—	The specification is objected to by the Examine The drawing(s) filed on is/are: a)☐ acce		Examiner			
10)[	Applicant may not request that any objection to the					
11)□	The proposed drawing correction filed on					
If approved, corrected drawings are required in reply to this Office action.						
12) ☐ The oath or declaration is objected to by the Examiner.						
Priority under 35 U.S.C. §§ 119 and 120						
13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).						
a) All b) Some * c) None of:						
	1. Certified copies of the priority documents have been received.					
	2. Certified copies of the priority documents have been received in Application No					
* (	3. Copies of the certified copies of the price application from the International Bee the attached detailed Office action for a lis	ureau (PCT Rule 17.2(a)).				
	Acknowledgment is made of a claim for domes					
a	a)  The translation of the foreign language processes to the foreign lang	rovisional application has bee	en received.			
Attachmer			•			
1)  Notic	ce of References Cited (PTO-892) ce of Draftsperson's Patent Drawing Review (PTO-948) mation Disclosure Statement(s) (PTO-1449) Paper No(s)	5) Notice of Inf	ormal Patent Application (PTO-152)			

Page 2

Art Unit: 1632

## **DETAILED ACTION**

This application filed May 4, 2001 is a 371 National stage filing of PCT/US99/15625, filed July 8, 1999, which claims benefit to US Application 09/113,774, filed July 10, 1998, now US Patent 6,129,911.

Claims 1-48 are pending and currently under examination.

## Election/Restriction

Restriction is required under 35 U.S.C. 121 and 372.

This application contains the following inventions or groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1.

In accordance with 37 CFR 1.499, applicant is required, in response to this action, to elect a single invention to which the claims must be restricted.

- Claims 1-15, 18-22 and 42, drawn to an isolated liver cell cluster comprising a liver stem cell.
- II. Claims 16, 17, 33 and 34, drawn to an isolated liver cell cluster comprising a liver stem cell which further comprises a heterologous polynucleotide encoding a therapeutic protein.
- III. Claims 35-41, drawn to method for obtaining a sample of isolated liver cells.
- IV. Claims 43 and 44, drawn to an extracorporeal liver assist device comprising a liver cell cluster.

Art Unit: 1632

- V. Claims 45 and 46, drawn to a method of hepatic transplant comprising transplanting an isolated liver cell cluster comprising a liver stem cell.
- VI. Claims 47 and 48, drawn to a method of treating a disease comprising transplanting an isolated liver cell cluster comprising a liver stem cell.

The inventions listed as Groups I-VI do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons:

- A) The inventions of group I, II, III, V and VI have been found by the Examiner to have no special technical feature that defined the contribution over the prior art. In the instant case, liver stem cells have previously been described in the art. Further, the general methodology encompassed by claim 35, group III, of isolating cells from a tissue has been previously described. Finally, Groups V and VI as broadly claimed encompass a liver transplant.
- B) Unity of invention between different categories of inventions will only be found to exist if specific combinations of inventions are present. Those combinations include:
  - A) A product and a special process of manufacture of said product.
  - B) A product and a process of use of said product.
- C) A product, a special process of manufacture of said product, and a process of use of said product.

Page 3

Art Unit: 1632

D) A process and an apparatus specially designed to carry out said process.

E) A product, a special process of manufacture of said product, and an apparatus specially

designed to carry out said process.

The allowed combinations do not include multiple products, multiple methods of using

said products, and methods of making multiple products as claimed in the instant application, see

MPEP § 1850.

Since Applicant's inventions as claimed do not contribute a special technical feature

when viewed over the prior art they do not have single general inventive concept and lack unity

of invention.

Because these inventions are distinct for the reasons given above have acquired a separate

status in the art as shown by their divergent subject matter restriction for examination purposes as

indicated is proper.

Applicant is advised that the reply to this requirement to be complete must include an

election of the invention to be examined even though the requirement be traversed (37)

CFR 1.143).

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the

inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently

named inventors is no longer an inventor of at least one claim remaining in the application. Any

Page 4

Page 5

Art Unit: 1632

amendment of inventorship must be accompanied by a petition under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joseph Woitach whose telephone number is (703)305-3732.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Deborah Reynolds, can be reached at (703)305-4051.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist Pauline Farrier whose telephone number is (703)305-3550.

Papers related to this application may be submitted by facsimile transmission. Papers should be faxed via the PTO Fax Center located in Crystal Mall 1. The faxing of such papers must conform with the notice published in the Official Gazette, 1096 OG 30 (November 15, 1989). The CM1 Fax Center numbers are (703)308-4242 and (703)305-3014.

Joseph T. Woitach

Joll Voitare AU1632